



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/534,710

10/11/2005

Shinya Muraoka

Y0647.0153

6896

32172 7590 05/30/2008

DICKSTEIN SHAPIRO LLP
1177 AVENUE OF THE AMERICAS (6TH AVENUE)
NEW YORK, NY 10036-2714

EXAMINER

BHATTACHARYA, SAM

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

05/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/534,710	Applicant(s) MURAOKA, SHINYA	
	Examiner Sam Bhattacharya	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-12 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 6-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Su (US 6,272,322) in view of Fitzgerald (US 6,466,548).

Regarding claims 1 and 6, Su discloses a radio base station apparatus which is used in a mobile radio communication system in which a plurality of radio terminals are simultaneously call-connected and the number of radio terminals which can be connected varies depending on an amount of interference, and exchanges baseband transmission/reception signals with an external radio device which performs radio communication with the radio terminals, characterized by comprising: a plurality of channel circuits which are respectively provided for radio channels used in the mobile radio communication system, convert transmission data, which are to be transmitted to radio terminals call-connected through the radio channels, into baseband transmission signals, output the signals to the external radio device with arbitrary transmission power, and output baseband reception signals from the external radio device as reception data from the radio terminals; loopback test means for testing a transmission function or a reception function of an arbitrary channel circuit by looping back a predetermined test signal which is output from a transmitting-side channel circuit, of said channel circuits, which serves as a transmitting side in a loopback test, and by receiving the test signal through a receiving-side

Art Unit: 2617

channel circuit of said channel circuits which serves as a receiving side in the loopback test; and a control unit which determines transmission power for the test signal in accordance with the number of call connections of a radio terminal call-connected to said apparatus in the loopback test, and indicates the transmission power to said transmitting-side channel circuit. See FIG. 4 and col. 5, lines 29-47.

Su fails to disclose that the loopback test signal is inside an apparatus. However, Fitzgerald discloses this feature in col. 7, lines 10-16. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus in Su by incorporating this feature taught in Fitzgerald for the purpose of ensuring that the apparatus is performing consistently compared to the other parts of the network.

Regarding claim 2, Su discloses characterized in that said control unit increases/decreases the transmission power of the test signal in accordance with an increase/decrease in the number of call connections, when the transmission power is determined. See col. 6, lines 50-63.

Regarding claim 3, Su discloses characterized in that in determining transmission power for the test signal, said control unit selects, as the transmission power, transmission power which satisfies, at least at the time of the number of call connections, a ratio between the test signal and an interference noise sum (SIR: Signal to Interference Ratio) which is obtained when the transmission power of the test signal is made equal to that of a radio terminal of interest when the number of call connections is 1. See col. 4, lines 30-54.

Regarding claim 4, Su discloses characterized in that said loopback test means comprises: a test data generating circuit which supplies test data used for a loopback test to said transmitting-side channel circuit; a selection circuit which loops back the test signal, as a

reception signal, from said transmitting-side channel circuit to said receiving-side channel circuit on the basis of the test data; and a test data comparison circuit which compares the test data supplied from said test data generating circuit with reception data of the test signal output from said receiving-side channel circuit. See col. 4, lines 30-54.

Claims 7-12 are rejected for the same reasons as claims 1-4 and 6.

Allowable Subject Matter

1. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
2. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose the recite combination of elements including a channel circuit comprising a power control circuit which adjusts transmission power of a transmission signal to the radio terminal in accordance with a request bit multiplexed on reception data from the radio terminal; a bit multiplexing circuit which multiplexes an instruction bit, which instructs the radio terminal to adjust transmission power, on transmission data to the radio terminal on the basis of a ratio between a reception signal from the radio terminal and an interference noise sum (SIR: Signal to Interference Ratio).

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (571) 272-7917. The examiner can normally be reached on Weekdays, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sb

/Sam Bhattacharya/

Examiner, Art Unit 2617